

REMARKS

This application has been reviewed in light of the Office Action dated November 14, 2007. Claims 1-8 remain in this application, of which Claims 1, 7 and 8 are in independent form. Claims 1-8 have been amended to define still more clearly what Applicant regards as his invention. Claims 9-16 have been cancelled without prejudice or disclaimer of subject matter, and will not be mentioned further. Favorable reconsideration is respectfully requested.

In the outstanding Office Action, Claim 8 was rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. That claim has been amended to conform with the current Patent and Trademark Office practice regarding such claims, and withdrawal of this rejection is therefore respectfully requested.

Claims 1-5, 7 and 8 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 7,113,152 (Ben-David et al.), and in addition, Claim 6 was rejected under 35 U.S.C. § 103(a) as being obvious from that patent in view of U.S. Patent 6,024,431 (Takahashi et al.).

The present invention generates image data composed of five or more color components from image data composed of three-color components (hereinafter “five or more color conversion”) using a converter which color-converts image data composed of the three-color components into image data composed of four-color components (hereinafter “four-color conversion”) at the same time. Hence, a controller of the invention sets a table for the four-color conversion to the converter and makes the converter perform the four -color conversion, and sets another table for color conversion to the converter to convert the image data composed of the three-color components into image data composed

of at least one color component except for the four- color components in the five or more color components (hereinafter “remaining color conversion”) and makes the converter perform the remaining color conversion. The four-color conversion and remaining color conversion are continuously performed by the controller. By virtue of these features of the invention, the problems described in the present application at page 3, line 13, to page 4, line 3, are solved: in other words, low-cost but high-speed five or more color conversion is realized using the converter for the four-color conversion.^{1/}

More particularly, independent Claim 1 is directed to an image processing apparatus that comprises a converter and a controller. The converter is arranged to color-convert image data composed of three-color components into image data composed of four-color components at the same time, and the controller causes the converter to perform continuous color conversions and to hold its color conversion result in a memory so as to generate image data composed of five or more color components. Also, according to Claim 1, the controller sets a table for first color conversion in the converter to convert image data composed of the three-color components into image data composed of the four-color components and causes the converter to perform the first color conversion, and also sets another table for second color conversion in the converter to convert the image data composed of the three-color components into image data composed of at least one color component except for the four-color components in the five or more color components and causes the converter to perform the second color conversion.

^{1/} It is of course to be understood that the foregoing references to “the invention” refer to the aspects of the present invention to which the present claims are directed, and do not necessarily apply to other aspects that are not being claimed at present.

Ben-David relates to a video projector and teaches forming an image on a viewing screen using seven-color lights. In the *Ben-David* system, that (i) RGB data is converted into XYZ data, (ii) xy data is calculated from the XYZ data, (iii) a triangle on a chromaticity diagram is selected in accordance with the xy data (as shown in Fig. 6B), and (iv) the color data corresponding to the selected triangle is stored in a frame buffer 78 (see Fig. 3B). Triangles on the chromaticity diagram shown in Fig. 6B correspond to the seven-color lights.

Applicant believes that the color transformation method of *Ben-David*, which transforms the RGB data into color data indicating the seven-color lights, is different from Applicant's claimed conversion method using tables for color conversion, because *Ben-David* performs his conversion of the RGB data into the color data corresponding to the seven-color lights using no converter that color-converts image data composed of three-color components into image data composed of three-color components into image data composed of four-color components at the same time.

As was correctly pointed out by the Examiner, *Ben-David* uses several look-up tables (col. 11, lines 32-35; page 4 of the Office Action). However, those look-up tables are used in gamma correction by a gamma-correction module 76, as described in col. 11, lines 25-35, and are not used in color transformation or color conversion.

For these reasons, it is believed to be clear that Claim 1 is allowable over *Ben-David*.

Independent Claims 7 and 8 are method and computer-readable-medium claims, respectively, corresponding to apparatus Claim 1, and are believed to be patentable for at least the same reasons as discussed above in connection with Claim 1.

A review of the other art of record, including *Takahashi*, has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as a reference against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from independent Claim 1, and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and allowance of the present application.

Applicant's undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

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